

Please amend the application as follows:

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Cancelled) ~~A method for delivery of a therapeutic neurotrophin to damaged, diseased or defective neurons in the mammalian brain, the method comprising directly delivering a neurotrophic composition, comprising a neurotrophin encoding expression vector, into one or more delivery sites within the brain; wherein the neurotrophin is expressed in a cell that is, or is in proximity to, a defective, diseased or damaged neuron; and wherein further contact with the neurotrophin ameliorates the defect, disease or damage.~~
2. (Previously Cancelled) ~~The method according to Claim 1, wherein the region of the brain containing the targeted neurons is the substantia nigra.~~
3. (Previously Cancelled) ~~The method according to Claim 2, wherein the targeted neurons are dopaminergic neurons.~~
4. (Previously Cancelled) ~~The method according to Claim 1, wherein the expression vector is a lentiviral vector.~~
5. (Previously Cancelled) ~~The method according to Claim 4, wherein the neurotrophic composition is a fluid having a concentration of neurotrophin encoding viral particles in the range from  $10^{10}$  to  $10^{15}$  particles per ml of neurotrophic composition.~~
6. (Previously Cancelled) ~~The method according to Claim 5, wherein from 2.5  $\mu$ l to 25  $\mu$ l of the neurotrophic composition is delivered to each delivery site.~~
7. (Previously Cancelled) ~~The method according to Claim 1, wherein the treated mammal is a human and the expression vector encodes a human neurotrophin.~~
8. (Previously Cancelled) ~~The method according to Claim 7, wherein the neurotrophin is human glial cell derived neurotrophic factor (GDNF).~~

9. (Previously Cancelled) ~~The method according to Claim 7, wherein the human is suffering from Parkinson's disease, and the disease is ameliorated by stimulation of growth of dopaminergic neurons.~~
10. (Previously Cancelled) ~~The method according to Claim 9, wherein the disease is ameliorated by reversal of deficits in motor function associated with the Parkinson's disease.~~
11. (Previously Cancelled) ~~The method according to Claim 7, wherein the human is suffering from Alzheimer's disease, and the disease is ameliorated by stimulation of growth of cholinergic neurons.~~
12. (Previously Cancelled) ~~The method according to Claim 11, wherein the disease is ameliorated by improvement of cognitive function whose impairment was associated with Alzheimer's disease.~~
13. (Previously Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is neurturin.~~
14. (Previously Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is NGF.~~
15. (Previously Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is NT-4/5.~~
16. (Previously Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is persephin.~~
17. (Previously Cancelled) ~~The method according to Claim 1, wherein the expression vector is an adeno-associated vector.~~
18. (Previously Cancelled) ~~The method according to Claim 4, wherein the lentiviral expression vector is HIV-1.~~
19. (Previously Cancelled) ~~The method according to Claim 1, wherein the neurotrophin is expressed within 500  $\mu$ m of a targeted cell.~~

20. (Previously Cancelled) ~~The method according to Claim 1, wherein each direct delivery site is no more than 10 mm from another direct delivery site.~~
21. (Currently Amended) A method for delivery of a therapeutic neurotrophin to targeted defective, diseased or damaged dopaminergic neurons in the mammalian brain, the method comprising directly delivering a neurotrophic composition, comprising a neurotrophin encoding expression vector transgene, into one or more delivery sites within a region of the brain containing targeted neurons, whereby the transgene is expressed in, or within 500  $\mu$ m from, a targeted cell, and no more than about 10 mm from another delivery site; and wherein further contact with the neurotrophin ameliorates the defect, disease or damage.
22. (Previously Presented) The method according to Claim 21, wherein the region of the brain containing the targeted neurons is the substantia nigra.
23. (Currently Amended) The method according to Claim 21, wherein the expression vector is a lentiviral expression vector.
24. (Previously Presented) The method according to Claim 21, wherein the treated mammal is a human and the expression vector encodes a human neurotrophin.
25. (Previously Presented) The method according to Claim 24, wherein the neurotrophin is human glial cell-derived neurotrophic factor (GDNF).
26. (Currently Amended) The method according to Claim 22, wherein the treated mammal is a human who is suffering from Parkinson's disease, and the disease is ameliorated by stimulation of growth of dopaminergic neurons.
27. (Previously Presented) The method according to Claim 26, wherein the disease is ameliorated by reversal of deficits in motor function associated with the Parkinson's disease.

28. (Previously Presented) The method according to Claim 21, wherein the neurotrophin is neurturin.
29. (Previously Presented) The method according to Claim 21, wherein the neurotrophin is NGF.
30. (Previously Presented) The method according to Claim 21, wherein the neurotrophin is NT-4/5.
31. (Previously Presented) The method according to Claim 21, wherein the neurotrophin is persephin.
32. (Currently Amended) The method according to Claim 21 ~~32~~, wherein from 2.5  $\mu$ l to 25  $\mu$ l of the composition is delivered to each delivery site.
33. (Previously Presented) The method according to Claim 21, wherein the expression vector is an adeno-associated vector.
34. (Previously Presented) The method according to Claim 23, wherein the lentiviral expression vector is HIV-1.